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Ultrasonic Wind Sensors

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Ultrasonic Wind Sensors



Specification	5747 IceFree Ultrasonic Wind Sensor RT240	5749 Ultrasonic Wind Sensor RT20
Sensor Type	<ul style="list-style-type: none"> ultrasonic wind speed and direction sensor 	<ul style="list-style-type: none"> ultrasonic wind speed and direction sensor
Applications	<ul style="list-style-type: none"> wind turbine control for onshore and offshore turbines in all weather conditions including ice and snow 	<ul style="list-style-type: none"> wind turbine control for onshore turbines in all weather conditions where significant icing is not a concern wind resource assessment
Dimensions	<ul style="list-style-type: none"> overall height: 170 mm (6.7 inches) 150 mm (5.9 inches) diameter 	<ul style="list-style-type: none"> overall height: 170 mm (6.7 inches) 150 mm (5.9 inches) diameter
Weight	<ul style="list-style-type: none"> 1.7 kg (3.75 lbs) 	<ul style="list-style-type: none"> 0.8 kg (1.76 lbs)
Heater	<ul style="list-style-type: none"> 240W 	<ul style="list-style-type: none"> 20W
Signal Type	<ul style="list-style-type: none"> RS-485 (NMEA, MODBUS, ASCII) or 4-20mA Additional signals available 	<ul style="list-style-type: none"> RS-485 (NMEA, MODBUS, ASCII) or 4-20mA Additional signals available
Wind Direction	<ul style="list-style-type: none"> Measuring Range <ul style="list-style-type: none"> 0° to 359.9° Resolution <ul style="list-style-type: none"> 0.1° Accuracy <ul style="list-style-type: none"> < 2° RMSE for wind speeds greater than 1.0 m/s (2.2 mph) Threshold <ul style="list-style-type: none"> 0.1 m/s (0.22 mph) Measurement output rate* <ul style="list-style-type: none"> 1 - 10 seconds adjustable 	<ul style="list-style-type: none"> Measuring Range <ul style="list-style-type: none"> 0° to 359.9° Resolution <ul style="list-style-type: none"> 0.1° Accuracy <ul style="list-style-type: none"> < 3° RSME for wind speeds greater than 1.0 m/s (2.2 mph) Threshold <ul style="list-style-type: none"> 0.3 m/s (0.67 mph) Measurement output rate* <ul style="list-style-type: none"> 1 - 10 seconds adjustable
Wind Speed	<ul style="list-style-type: none"> Measuring Range <ul style="list-style-type: none"> 0 to 75 m/s (0 to 167.8 mph) Resolution <ul style="list-style-type: none"> 0.1 m/s (0.22 mph) Accuracy <ul style="list-style-type: none"> ±0.2 m/s (±0.45 mph) or ±2% of reading RMS, whichever is greater Threshold* <ul style="list-style-type: none"> 0.1 m/s (0.22 mph) Measurement output rate* <ul style="list-style-type: none"> 1 - 10 seconds adjustable 	<ul style="list-style-type: none"> Measuring Range <ul style="list-style-type: none"> 0 to 75 m/s (0 to 167.8 mph) Resolution <ul style="list-style-type: none"> 0.1 m/s (0.22 mph) Accuracy <ul style="list-style-type: none"> ±0.3 m/s (0.67 mph) or ±3% of reading RMS for wind speeds from 0 to 35 m/s (0 to 78.3 mph), whichever is greater; ±5% RSM for wind speeds greater than 35 m/s (78.3 mph) Threshold* <ul style="list-style-type: none"> 0.3 m/s (0.67 mph) Measurement output rate* <ul style="list-style-type: none"> 1 - 10 seconds adjustable
Virtual Temperature	<ul style="list-style-type: none"> Measuring Range <ul style="list-style-type: none"> -50° to 70°C (-58°F to 158°F) Resolution <ul style="list-style-type: none"> 0.1°C (0.2°F) Accuracy <ul style="list-style-type: none"> ±2°C (±3.6°F) Measurement output rate* <ul style="list-style-type: none"> 1 - 10 seconds adjustable 	<ul style="list-style-type: none"> Measuring Range <ul style="list-style-type: none"> -50° to 70°C (-58°F to 158°F) Resolution <ul style="list-style-type: none"> 0.1°C (0.2°F) Accuracy <ul style="list-style-type: none"> ±2°C (±3.6°F) Measurement output rate* <ul style="list-style-type: none"> 1 - 10 seconds adjustable
Bus Operation	<ul style="list-style-type: none"> up to 32 devices 	<ul style="list-style-type: none"> up to 32 devices
Power requirements	<ul style="list-style-type: none"> without heating <ul style="list-style-type: none"> 24VDC±10%; 50mA (1.2W) with heating* <ul style="list-style-type: none"> 24VDC±10%; 10A maximum (240W maximum, 140W + 100W) 	<ul style="list-style-type: none"> 24VDC±10%; 50mA (1.2W) 24VDC±10%; 880mA maximum (21W)
Connection	<ul style="list-style-type: none"> 8 pole plug, Amphenol C091 31D008 101 2 	<ul style="list-style-type: none"> 8 pole plug, Amphenol C091 31D008 101 2
Housing Material	<ul style="list-style-type: none"> aluminum 	<ul style="list-style-type: none"> polycarbonate
Pole Diameter	<ul style="list-style-type: none"> 50 mm (2 inches) 	<ul style="list-style-type: none"> 50 mm (2 inches)
Environmental	<ul style="list-style-type: none"> Operating temperature <ul style="list-style-type: none"> -40° to 60°C (-40°F to 140°F) Protection <ul style="list-style-type: none"> IP65 	<ul style="list-style-type: none"> Operating temperature <ul style="list-style-type: none"> -40° to 60°C (-40°F to 140°F) Protection <ul style="list-style-type: none"> IP65

* factory configured per customer specification

To Place Your Order

Contact NRG Sales, 802-482-2255 or visit nrgsystems.com

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